Chingyuan “Alan” Yang

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PROFESSIONAL SUMMARY

Full Stack Software Developer with 5 years of experience building cloud native applications, backed by 9 years in the IT industry. Specialized in React (TypeScript), Java Spring Boot, AWS, and Oracle databases, integrates AI-augmented development (GitHub Copilot) to accelerate agentic coding, testing, documentation, and code reviews. Experienced in designing RESTful APIs, microservices architectures, and scalable backend systems processing millions of records monthly. Strong background in system performance optimization, Agile Scrum delivery, cross functional collaboration, and accessibility compliant enterprise and government web applications. Holds a Master’s in Computer Science with advanced knowledge of distributed systems.

Certifications: AWS Certified Developer, Oracle certified professional, Java SE 8 programmer, Oracle certified associate, Java SE 8

PROFESSIONAL EXPERIENCE

Full Stack Software Developer | Booz Allen Hamilton | Mclean, VA | 11/2022 – Present| React.ts, Java Spring Boot, Oracle DB, AWS

- Enhanced core modules of a large-scale medical Content Management Tool built with React, TypeScript and Java Spring Boot. Implemented conditional logic, dynamic text rendering, and custom object propagation across hundreds of document templates with XML outputs to AWS S3, supporting automated generation of millions of medical documents monthly.
- Modernized legacy JMS topics into secure RESTful APIs with JWT authentication. Additionally, developed enhancements for AWS SQS integration and multiple Spring Boot microservices to efficiently fetch document metadata and process medical examination data, contributing to a high throughput messaging system processing tens of millions of messages monthly.
- Developed and maintained database schemas using Liquibase for version-controlled updates to Oracle databases hosted in a Docker container; implemented custom SQL queries and leveraged Hibernate JPA to perform seamless ORM mapping, persisting Java objects to relational tables.
- Engineered unit tests with Jest, React Testing Library, JUnit, and Groovy; used AI-augmented development with GitHub Copilot to accelerate coding, unit test creation, defect detection, third-party library adoption, documentation, and PR review while maintaining quality through ESLint, Splunk log tracing, and Jenkins CI/CD pipelines.
- Contributed to system design efforts using the 4+1 architectural view model, leveraged GitHub Spec Kit to turn requirements into clear implementation plans and maintainable solutions, producing UML diagrams, workflow charts, UI/UX wireframes, and database schema designs; developed a prototype application to validate the “objects propagation across documents” solution.
- Worked in an Agile Scrum development to implement accessible front-end interfaces adhering to the U.S. Web Design System (USWDS) and Section 508 WCAG 2.1 accessibility standards for government web applications; ensured compatibility with JAWS screen reader as part of a system that contributed to significantly improved veterans related government process efficiency.

Full Stack Software Developer | Bridgestone/ Former Tyrata Inc | Durham, NC | 6/2021 – 11/2022| Vue.js, Python, bash, GCP

- Utilized Vue.js, Python, and Lodash to implement 4 major enhancements to the web application, including Service Worker based offline capable notifications and email integration, user management, client info organization, and maintenance record tracking.
- Developed 30+ backend APIs to support firmware and web app requests, leveraging Google Firestore, a document based non-relational database to handle dynamic tire data and real time notifications, enabling a highly responsive user experience.
- Improved website response time by 50% by refining data structures and designing a more efficient JavaScript binary search algorithm based on alphabetical order. Boosted processing speed by 80% through the use of Google Pub/Sub, enabling multiple virtual machines to manage tire tread depth data notifications asynchronously and reliably.
- Developed bash scripts to automate firmware updates and perform logging tasks, ensuring consistent system performance and traceability. Applied pandas, NumPy, and Jupyter Notebooks to analyze Google Firestore data and perform consistent unit testing for reliability. Built complex Linux environments configured with Conda and various Python packages.
- Packaged Python applications using PyInstaller to manage dependencies and used PyArmor to obfuscate source code for enhanced security and portability. Utilized Electron framework and Python flask to develop windows desktop applications that accurately identified and analyzed tire tread depths.
- Enhanced the web interface and data visualizations using Plotly.js and LeaderLine, Improved usability and user experience for systems managing an average of 1,800 tires and 300 vehicles per major logistics and e-commerce client.

IT Supervisor/ IT Administrator| Foxconn - Foxconn Assembly/ Q-EDGE | Durham, NC | 2014 - 2018 | Oracle, Microsoft SQL

- Led a team of two IT members, collaborating with engineering team and management to discuss technical requirements, conduct acceptance testing, demonstrating strong communication and decision making. Ensured full SDLC alignment and prevented system issues by 20% through enforcing workflow procedures and preventive actions to reduce human error.
- Utilized SQL to develop stored procedures, views and triggers in Oracle DB and Microsoft SQL Server to support production data analysis. Enhanced the Shop Floor Control System, reducing downtime by 60% and improving team efficiency by 30% through workflow optimizations, system debugging, and cross functional collaboration.

EDUCATION

Master of Science in Computer Science | Clemson University, Clemson, SC | 2019 - 2020 | GPA **3.93**/4.0

- Coursework: Distributed, Parallel, GPU Cuda programming, Relational Database, Linux Admin, Information Retrieval, Blockchain.

MBA in Information Management | Chung Yuan Christian University, Taiwan | 2010 - 2012 | GPA **3.82**/4.0